

OIPE

## RAW SEQUENCE LISTING

DATE: 06/25/2001

PATENT APPLICATION: US/09/424,487B

TIME: 11:59:11

Input Set : A:\71278264.app

Output Set: N:\CRF3\06252001\I424487B.raw

ENTERED

3 <110> APPLICANT: CHOO, YEN  
 4 KLUG, AARON  
 5 ISALAN, MARK  
 7 <120> TITLE OF INVENTION: NUCLEIC ACID BINDING PROTEINS  
 9 <130> FILE REFERENCE: 71278/264975  
 11 <140> CURRENT APPLICATION NUMBER: 09/424,487B  
 C--> 12 <141> CURRENT FILING DATE: 2000-02-29  
 14 <150> PRIOR APPLICATION NUMBER: GB 9710809.6  
 15 <151> PRIOR FILING DATE: 1997-05-23  
 17 <150> PRIOR APPLICATION NUMBER: PCT/GB98/01512  
 18 <151> PRIOR FILING DATE: 1998-05-26  
 20 <160> NUMBER OF SEQ ID NOS: 114  
 22 <170> SOFTWARE: PatentIn Ver. 2.1  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 264  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Artificial Sequence  
 29 <220> FEATURE:  
 30 <221> NAME/KEY: CDS  
 31 <222> LOCATION: (1)..(264)  
 33 <220> FEATURE:  
 34 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA  
 36 <400> SEQUENCE: 1  
 37 gca gaa gag aag cct ttt cag tgt cga atc tgc atg cgt aac ttc agc 48  
 38 Ala Glu Glu Lys Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser  
 39 1 5 10 15  
 41 gat cgt act act ctt acc cgc cac acg agg acc cac aca ggc gag aag 96  
 42 Asp Arg Thr Thr Leu Thr Arg His Thr Arg Thr His Thr Gly Glu Lys  
 43 20 25 30  
 45 cct ttt cag tgt cga atc tgc atg cgt aac ttc agc agg agc gat aac 144  
 46 Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp Asn  
 47 35 40 45  
 49 ctt acg aga cac cta agg acc cac aca ggc gag aag cct ttt cag tgt 192  
 50 Leu Thr Arg His Leu Arg Thr His Thr Gly Glu Lys Pro Phe Gln Cys  
 51 50 55 60  
 53 cga atc tgc atg cgt aac ttc agg caa gct gat cat ctt caa gag cac 240  
 54 Arg Ile Cys Met Arg Asn Phe Arg Gln Ala Asp His Leu Gln Glu His  
 55 65 70 75 80  
 57 cta aag acc cac aca ggc gag aag 264  
 58 Leu Lys Thr His Thr Gly Glu Lys  
 59 85  
 62 <210> SEQ ID NO: 2  
 63 <211> LENGTH: 88  
 64 <212> TYPE: PRT  
 65 <213> ORGANISM: Artificial Sequence  
 67 <220> FEATURE:  
 68 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic amino acid

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70 &lt;400&gt; SEQUENCE: 2

```

71 Ala Glu Glu Lys Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser
72 1      5      10      15
74 Asp Arg Thr Thr Leu Thr Arg His Thr Arg Thr His Thr Gly Glu Lys
75      20      25      30
77 Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp Asn
78      35      40      45
80 Leu Thr Arg His Leu Arg Thr His Thr Gly Glu Lys Pro Phe Gln Cys
81      50      55      60
83 Arg Ile Cys Met Arg Asn Phe Arg Gln Ala Asp His Leu Gln Glu His
84 65      70      75      80
86 Leu Lys Thr His Thr Gly Glu Lys
87      85

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90 &lt;210&gt; SEQ ID NO: 3

91 &lt;211&gt; LENGTH: 24

92 &lt;212&gt; TYPE: PRT

93 &lt;213&gt; ORGANISM: Artificial Sequence

95 &lt;220&gt; FEATURE:

96 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger  
 97 motif

99 &lt;220&gt; FEATURE:

100 &lt;221&gt; NAME/KEY: MOD\_RES

101 &lt;222&gt; LOCATION: (1)

102 &lt;223&gt; OTHER INFORMATION: Any amino acid

104 &lt;220&gt; FEATURE:

105 &lt;221&gt; NAME/KEY: MOD\_RES

106 &lt;222&gt; LOCATION: (3)..(6)

107 <223> OTHER INFORMATION: This region may encompass 2-4 residues consisting of  
 108 any amino acid

110 &lt;220&gt; FEATURE:

111 &lt;221&gt; NAME/KEY: MOD\_RES

112 &lt;222&gt; LOCATION: (8)..(10)

113 <223> OTHER INFORMATION: This region may encompass 2-3 residues consisting of  
 114 any amino acid

116 &lt;220&gt; FEATURE:

117 &lt;221&gt; NAME/KEY: MOD\_RES

118 &lt;222&gt; LOCATION: (12)..(16)

119 &lt;223&gt; OTHER INFORMATION: Any amino acid

121 &lt;220&gt; FEATURE:

122 &lt;221&gt; NAME/KEY: MOD\_RES

123 &lt;222&gt; LOCATION: (18)..(19)

124 &lt;223&gt; OTHER INFORMATION: Any amino acid

126 &lt;220&gt; FEATURE:

127 &lt;221&gt; NAME/KEY: MOD\_RES

128 &lt;222&gt; LOCATION: (21)..(23)

129 &lt;223&gt; OTHER INFORMATION: Any amino acid

131 &lt;400&gt; SEQUENCE: 3

W--> 132 Xaa Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Xaa Xaa Xaa  
 133 1 5 10 15

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W--> 135 Leu Xaa Xaa His Xaa Xaa Xaa His
      136          20
      139 <210> SEQ ID NO: 4
      140 <211> LENGTH: 4
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      142 <213> ORGANISM: Artificial Sequence
      144 <220> FEATURE:
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      147 <400> SEQUENCE: 4
      148 Thr Gly Glu Lys
      149      1
      152 <210> SEQ ID NO: 5
      153 <211> LENGTH: 5
      154 <212> TYPE: PRT
      155 <213> ORGANISM: Artificial Sequence
      157 <220> FEATURE:
      158 <223> OTHER INFORMATION: Description of Artificial Sequence: Linker
      160 <400> SEQUENCE: 5
      161 Thr Gly Glu Lys Pro
      162      1          5
      165 <210> SEQ ID NO: 6
      166 <211> LENGTH: 26
      167 <212> TYPE: PRT
      168 <213> ORGANISM: Artificial Sequence
      170 <220> FEATURE:
      171 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus
      172      structure
      174 <400> SEQUENCE: 6
      175 Pro Tyr Lys Cys Pro Glu Cys Gly Lys Ser Phe Ser Gln Lys Ser Asp
      176      1          5          10          15
      178 Leu Val Lys His Gln Arg Thr His Thr Gly
      179      20          25
      182 <210> SEQ ID NO: 7
      183 <211> LENGTH: 29
      184 <212> TYPE: PRT
      185 <213> ORGANISM: Artificial Sequence
      187 <220> FEATURE:
      188 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus
      189      structure
      191 <400> SEQUENCE: 7
      192 Pro Tyr Lys Cys Ser Glu Cys Gly Lys Ala Phe Ser Gln Lys Ser Asn
      193      1          5          10          15
      195 Leu Thr Arg His Gln Arg Ile His Thr Gly Glu Lys Pro
      196      20          25
      199 <210> SEQ ID NO: 8
      200 <211> LENGTH: 6
      201 <212> TYPE: PRT
      202 <213> ORGANISM: Artificial Sequence
      204 <220> FEATURE:

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Input Set : A:\71278264.app

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205 <223> OTHER INFORMATION: Description of Artificial Sequence: Leader peptide  
 207 <400> SEQUENCE: 8  
 208 Met Ala Glu Glu Lys Pro  
 209 1 5  
 212 <210> SEQ ID NO: 9  
 213 <211> LENGTH: 28  
 214 <212> TYPE: PRT  
 215 <213> ORGANISM: Artificial Sequence  
 217 <220> FEATURE:  
 218 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger  
 219 peptide  
 221 <400> SEQUENCE: 9  
 222 Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Asp Arg Ser Ser Leu  
 223 1 5 10 15  
 225 Thr Arg His Thr Arg Thr His Thr Gly Glu Lys Pro  
 226 20 25  
 229 <210> SEQ ID NO: 10  
 230 <211> LENGTH: 28  
 231 <212> TYPE: PRT  
 232 <213> ORGANISM: Artificial Sequence  
 234 <220> FEATURE:  
 235 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger  
 236 peptide  
 238 <400> SEQUENCE: 10  
 239 Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Asp Arg Ser His Leu  
 240 1 5 10 15  
 242 Thr Arg His Thr Arg Thr His Thr Gly Glu Lys Pro  
 243 20 25  
 246 <210> SEQ ID NO: 11  
 247 <211> LENGTH: 27  
 248 <212> TYPE: PRT  
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 251 <220> FEATURE:  
 252 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger  
 253 peptide  
 255 <400> SEQUENCE: 11  
 256 Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Asp Arg Ser Asn Leu  
 257 1 5 10 15  
 259 Thr Arg His Thr Arg Thr His Thr Gly Glu Lys  
 260 20 25  
 263 <210> SEQ ID NO: 12  
 264 <211> LENGTH: 36  
 265 <212> TYPE: PRT  
 266 <213> ORGANISM: Artificial Sequence  
 268 <220> FEATURE:  
 269 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger  
 270 peptide  
 272 <400> SEQUENCE: 12  
 273 Met Ala Glu Glu Arg Pro Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg

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274      1              5              10              15
276 Arg Phe Ser Arg Ser Asp Glu Leu Thr Arg His Ile Arg Ile His Thr
277              20              25              30
279 Gly Gln Lys Pro
280              35
283 <210> SEQ ID NO: 13
284 <211> LENGTH: 27
285 <212> TYPE: PRT
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger
290      peptide
292 <400> SEQUENCE: 13
293 Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp Asp Leu
294      1              5              10              15
296 Thr His Ile Arg Thr His Thr Gly Glu Lys Pro
297              20              25
300 <210> SEQ ID NO: 14
301 <211> LENGTH: 26
302 <212> TYPE: PRT
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger
307      peptide
309 <400> SEQUENCE: 14
310 Phe Ala Cys Asp Ile Cys Gly Arg Lys Phe Ala Ser Asp Arg Lys Arg
311      1              5              10              15
313 His Thr Lys Ile His Leu Arg Gln Lys Asp
314              20              25
317 <210> SEQ ID NO: 15
318 <211> LENGTH: 4
319 <212> TYPE: PRT
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger
324      peptide
326 <400> SEQUENCE: 15
327 Arg Leu Glu Tyr
328      1
331 <210> SEQ ID NO: 16
332 <211> LENGTH: 4
333 <212> TYPE: PRT
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Description of Artificial Sequence: Zinc finger
338      peptide
340 <400> SEQUENCE: 16
341 Arg Ser Glu Asp
342      1

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**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/424,487B

DATE: 06/25/2001

TIME: 11:59:12

Input Set : A:\71278264.app

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3

L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3